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*GEOREF       - Geological Reference File 1785-present

  * The files listed above are temporarily unavailable.

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=> file pnttext
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.22       0.22

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CA INDEXING COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 10:21:19 ON 25 JAN 2010
CA INDEXING COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

=> s proton conducting polymer membrane#
L1          431 PROTON CONDUCTING POLYMER MEMBRANE#

=> s l1 and sulfonated polymer# and benzimidazole#
   4 FILES SEARCHED...
L2           18 L1 AND SULFONATED POLYMER# AND BENZIMIDAZOLE#

=> s l2 and aromatic tetraamino compound# and aromatic carboxylic acid#
   5 FILES SEARCHED...
L3            5 L2 AND AROMATIC TETRAAMINO COMPOUND# AND AROMATIC CARBOXYLIC
                ACID#

=> s l3 and inert gas? and temperature#
   4 FILES SEARCHED...
   5 FILES SEARCHED...
L4            5 L3 AND INERT GAS? AND TEMPERATURE#

=> d l4 1-5
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L4 ANSWER 1 OF 5 EPFULL COPYRIGHT 2010 EPO/FIZ KA/LNU on STN

AN 2003:70266 EPFULL
DUPD 20040310 DUPW 200411
TIEN PROTON-CONDUCTING MEMBRANE AND THE USE THEREOF.
TIFR MEMBRANE CONDUCTRICE DE PROTONS ET SON UTILISATION.
TIDE PROTONENLEITENDE MEMBRAN UND DEREN VERWENDUNG.
IN CALUNDANN, Gordon, 1275 Rock Avenue, North Plainfield, NJ 07060, US;
SANSONE, Michael, J., 73 Cornell Avenue, Berkeley Heights, NJ 07927, US;
UENSAL, Oemer, Suedring 387, 55128 Mainz, DE;
KIEFER, Joachim, Scheidener Strasse 2, 66679 Losheim am See, DE
PA Celanese Ventures GmbH, (Ventures GmbH, Celanese), , 65926 Frankfurt am Main, DE
PAN 3179301
DT Patent
LAF German
LA German
LAP German
TL German; English; French
PIT WOA1 International application published with search report
PI WO 2004003061 A1 20040108
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL
EXTENSION STATES: AL LT LV MK
AI EP 2003-740253 A 20030614
WO 2003-EP6308 A 20030614
PRAI DE 2002-10228657 A 20020627
IC.VER 7
ICM C08J005-00
ICS C08J005-22; H01M008-10; H01M004-00; C08G073-00

AN 2003:70266 EPFULL ED 20050406 UP 20060223
DUPD 20060208 DUPW 200606
TIEN PROTON-CONDUCTING MEMBRANE AND THE USE THEREOF.
TIFR MEMBRANE CONDUCTRICE DE PROTONS ET SON UTILISATION.
TIDE PROTONENLEITENDE MEMBRAN UND DEREN VERWENDUNG.
IN CALUNDANN, Gordon, 1275 Rock Avenue, North Plainfield, NJ 07060, US;
SANSONE, Michael, J., 73 Cornell Avenue, Berkeley Heights, NJ 07927, US;
UENSAL, Oemer, Suedring 387, 55128 Mainz, DE;
KIEFER, Joachim, Scheidener Strasse 2, 66679 Losheim am See, DE
PA Pemeas GmbH, 65926 Frankfurt am Main, DE
PAN 4944860
AG Luderschmidt, Schueler & Partner GbR, Patentanwaelte, Industriepark Hoechst, Geb. F821, 65926 Frankfurt am Main, DE
AGN 101418
DT Patent
LAF German
LA German
LAP German
TL German; English; French
PIT EPA1 Application published with search report
PI EP 1519981 A1 20050406
WO 2004003061 20040108
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR
AI EP 2003-740253 A 20030614
WO 2003-EP6308 A 20030614
PRAI DE 2002-10228657 A 20020627
IPCI C08J0005-00 [I,A]; C08J0005-22 [I,A]; H01M0008-10 [I,A];

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H01M0004-00 [I,A]; C08G0073-00 [I,A]
C08J0005-00 [I,C*]; C08J0005-20 [I,C*]; H01M0008-10 [I,C*];
H01M0004-00 [I,C*]; C08G0073-00 [I,C*]

AN 2003:70266 EPFULL ED 20060629 UP 20091021
DUPD 20091021 DUPW 200943
TIEN PROTON-CONDUCTING MEMBRANE AND THE USE THEREOF.
TIFR MEMBRANE CONDUCTRICE DE PROTONS ET SON UTILISATION.
TIDE PROTONENLEITENDE MEMBRAN UND DEREN VERWENDUNG.
IN CALUNDANN, Gordon, 1275 Rock Avenue, North Plainfield, NJ 07060, US;
SANSONE, Michael, J., 73 Cornell Avenue, Berkeley Heights, NJ 07927, US;
UENSAL, Oemer, Suedring 387, 55128 Mainz, DE;
KIEFER, Joachim, Scheidener Strasse 2, 66679 Losheim am See, DE
PA Pemeas GmbH, 65926 Frankfurt am Main, DE
PAN 4944860
AG Luderschmidt, Schueler & Partner, Patentanwaelte Industriepark Hoechst,
Gebaeude F 821, 65926 Frankfurt, DE
AGN 101414
DT Patent
LAF German
LA German
LAP German
TL German; English; French
PIT EPB1 Granted patent
PI EP 1519981 B1 20060628
WO 2004003061 20040108
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE
SI SK TR
AI EP 2003-740253 A 20030614
WO 2003-EP6308 A 20030614
PRAI DE 2002-10228657 A 20020627
REP US 3313783 A (INID56)
US 5218076 A (INID56)
US 5525436 A (INID56)
REN (1) OSAHENI J A ET AL: "SYNTHESIS AND PROCESSING OF HETEROCYCLIC
POLYMERS AS ELECTRONIC, OPTOELECTRONIC, AND NONLINEAR OPTICAL MATERIALS.
4 NEW CONJUGATED RIGID-ROD POLY(BENZOBIS(IMIDAZOLE)S" MACROMOLECULES,
AMERICAN CHEMICAL SOCIETY. EASTON, US, Bd. 28, Nr. 4, 13. Februar 1995
(1995-02-13), Seiten 1172-1179, XP000490475 ISSN: 0024-9297 (INID56)
IPCI C08J0005-00 [I,A]; C08J0005-22 [I,A]; H01M0008-10 [I,A];
H01M0004-00 [I,A]; C08G0073-00 [I,A]
C08J0005-00 [I,C*]; C08J0005-20 [I,C*]; H01M0008-10 [I,C*];
H01M0004-00 [I,C*]; C08G0073-00 [I,C*]

L4 ANSWER 2 OF 5 USPATFULL on STN
AN 2007:62900 USPATFULL
TI Proton-conducting polymer membrane
containing polymers with sulfonic acid groups that are covalently bonded
to aromatic groups, membrane electrode unit, and use thereof in fuel
cells
IN Kiefer, Joachi, Losheim am See, GERMANY, FEDERAL REPUBLIC OF
Uensal, Oemer, Mainz, GERMANY, FEDERAL REPUBLIC OF
PA PEMEAS GMBH, FRANKFURT, GERMANY, FEDERAL REPUBLIC OF (non-U.S.
corporation)
PI US 20070055045 A1 20070308
AI US 2004-570637 A1 20040904 (10)
WO 2004-EP9900 20040904
20060303 PCT 371 date
PRAI DE 2003-10340927 20030904

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DT Utility
FS APPLICATION
LN.CNT 1474
INCL INCLM: 528/373.000
NCL NCLM: 528/373.000
IC IPCI C08G0075-00 [I,A]
IPCR C08G0075-00 [I,C]; C08G0075-00 [I,A]; C08J0005-20 [I,C*];
C08J0005-22 [I,A]; H01M0004-86 [N,C*]; H01M0004-86 [N,A];
H01M0004-90 [N,C*]; H01M0004-92 [N,A]; H01M0008-10 [I,C*];
H01M0008-10 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 5 USPATFULL on STN
AN 2006:67231 USPATFULL
TI Proton-conducting membrane and the use thereof
IN Calundann, Gordon, North Plainfield, NJ, UNITED STATES
Sansone, Michael J, Berkeley Heights, NJ, UNITED STATES
Uensal, Oemer, Mainz, GERMANY, FEDERAL REPUBLIC OF
Kiefer, Joachim, Losheim am See, GERMANY, FEDERAL REPUBLIC OF
PI US 20060057449 A1 20060316
AI US 2003-519281 A1 20030614 (10)
WO 2003-EP6308 20030614
20050804 PCT 371 date
PRAI DE 2002-10228657 20020627
DT Utility
FS APPLICATION
LN.CNT 976
INCL INCLM: 429/033.000
INCLS: 521/027.000; 429/314.000
NCL NCLM: 429/033.000
NCLS: 429/314.000; 521/027.000
IC IPCI C08J0005-22 [I,A]; C08J0005-20 [I,C*]; H01M0008-10 [I,A]
IPCR C08J0005-20 [I,C]; C08J0005-22 [I,A]; B01D0071-00 [I,C*];
B01D0071-62 [I,A]; B01D0071-82 [I,A]; C08G0073-00 [I,C*];
C08G0073-06 [I,A]; C08G0073-08 [I,A]; C08G0073-18 [I,A];
C08G0073-22 [I,A]; H01M0008-10 [I,C]; H01M0008-10 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 5 USPATFULL on STN
AN 2005:280748 USPATFULL
TI Proton-conducting polymer membrane
comprising a polymer with sulphonic acid groups and use thereof in fuel
cells
IN Kiefer, Joachim, Losheim am See, GERMANY, FEDERAL REPUBLIC OF
Uensal, Oemer, Mainz, GERMANY, FEDERAL REPUBLIC OF
Calundann, Gordon, North Plainfield, NJ, UNITED STATES
PI US 20050244695 A1 20051103
US 7332530 B2 20080219
AI US 2003-523373 A1 20030731 (10)
WO 2003-EP8462 20030731
20050323 PCT 371 date
PRAI DE 2002-10235356 20020802
DE 2003-10235357 20020802
DT Utility
FS APPLICATION
LN.CNT 1441
INCL INCLM: 429/033.000
INCLS: 521/027.000
NCL NCLM: 521/027.000; 429/033.000

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       NCLS:  429/030.000; 429/033.000; 521/030.000; 526/286.000
IC     [7]
       ICM    H01M008-10
       ICS    C08J005-22
       IPCI   H01M0008-10 [ICM,7]; C08J0005-22 [ICS,7]; C08J0005-20 [ICS,7,C*]
       IPCI-2 C08J0005-22 [I,A]; C08J0005-20 [I,C*]; H01M0008-10 [I,A]
       IPCR   C08J0005-20 [I,C]; C08J0005-22 [I,A]; B01D0067-00 [I,C*];
              B01D0067-00 [I,A]; B01D0069-00 [I,C*]; B01D0069-14 [I,A];
              B01D0071-00 [I,C*]; B01D0071-62 [I,A]; B01D0071-64 [I,A];
              B01D0071-72 [I,A]; C08G0061-00 [I,C*]; C08G0061-12 [I,A];
              C08G0073-00 [I,C*]; C08G0073-06 [I,A]; C08G0073-08 [I,A];
              C08G0073-10 [I,A]; C08G0073-18 [I,A]; C08G0073-22 [I,A];
              C08G0079-00 [I,C*]; C08G0079-04 [I,A]; H01M0008-10 [I,C];
              H01M0008-10 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 5 OF 5  USPAT2 on STN
AN     2005:280748  USPAT2
TI     Proton-conducting polymer membrane
       comprising a polymer with sulphonic acid groups and use thereof in fuel
       cells
IN     Kiefer, Joachim, Losheim am See, GERMANY, FEDERAL REPUBLIC OF
       Uensal, Oemer, Mainz, GERMANY, FEDERAL REPUBLIC OF
       Calundann, Gordon, North Plainfield, NJ, UNITED STATES
PA     Celanese Ventures GmbH, Frankfurt am Main, GERMANY, FEDERAL REPUBLIC OF
       (non-U.S. corporation)
PI     US 7332530          B2  20080219
       WO 2004015803           20040219
AI     US 2003-523373          20030731 (10)
       WO 2003-EP8462          20030731
                               20050323  PCT 371 date
PRAI   DE 2002-10235356        20020802
       DE 2002-10235357        20020802
DT     Utility
FS     GRANTED
LN.CNT 1491
INCL   INCLM: 521/027.000
       INCLS: 521/030.000; 429/030.000; 429/033.000; 526/286.000
NCL    NCLM:  521/027.000; 429/033.000
       NCLS:  429/030.000; 429/033.000; 521/030.000; 526/286.000
IC     IPCI   H01M0008-10 [ICM,7]; C08J0005-22 [ICS,7]; C08J0005-20 [ICS,7,C*]
       IPCI-2 C08J0005-22 [I,A]; C08J0005-20 [I,C*]; H01M0008-10 [I,A]
       IPCR   C08J0005-20 [I,C]; C08J0005-22 [I,A]; B01D0067-00 [I,C*];
              B01D0067-00 [I,A]; B01D0069-00 [I,C*]; B01D0069-14 [I,A];
              B01D0071-00 [I,C*]; B01D0071-62 [I,A]; B01D0071-64 [I,A];
              B01D0071-72 [I,A]; C08G0061-00 [I,C*]; C08G0061-12 [I,A];
              C08G0073-00 [I,C*]; C08G0073-06 [I,A]; C08G0073-08 [I,A];
              C08G0073-10 [I,A]; C08G0073-18 [I,A]; C08G0073-22 [I,A];
              C08G0079-00 [I,C*]; C08G0079-04 [I,A]; H01M0008-10 [I,C];
              H01M0008-10 [I,A]
EXF    521/27; 521/30; 429/33; 429/30; 526/286
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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